

# TECHNICAL OPERATIONS

## Troubleshooting Guide

- 1 **Reset Equipment** As a first step in trouble shooting power down your station's receiver and receiver control unit (RCU) for 5 seconds. Authorisation is not lost when the receiver is powered down. Dirty power or signal interference can sometimes cause the MPEG decoder in the receiver to lock-up (even if pulsing continues).
- 2 **Loss of signal in the early morning** Could be due to a spider in the feedhorn or the LNB, the morning dew collects on the fresh web and degrades the signal.
- 3 **Loss of audio/commands** Being a digital system, once the bit error rate exceeds a preset threshold within the receiver, the receiver mutes. The lock light on the receiver will progressively go from GREEN to OFF to RED as signal degrades - this could be local interference or uplink rainfade (see 5).
- 4 **Sun Transit Interference** There are certain times of the year when, due to the rotation of the Earth around the Sun, the Sun appears behind the satellite. The Sun is an extremely high source of electromagnetic radiation, this in turn is received by the antenna and the receiver is overloaded with interference. The outage lasts only for a short time period, these periods can be predicted, affiliate stations are always notified during Sun transit season.
- 5 **Rainfade** Heavy rain can block the signal from the satellite. The fade can occur either at the uplink or the receiving site. Maximum power is always applied to the uplink in order to minimise the affect to the receiving sites. Rainfade can have more of an effect on poorly aligned/small dishes or in systems where the signal is otherwise attenuated.
- 6 **Other satellite receivers that loop through the RF** can affect IDC receivers further down the chain. If your Fairfax Radio Syndication receivers lose lock for no reason, bypass any other receivers to ensure the IDCs are being fed directly.
- 7 **Dish Alignment Checks:** At regular intervals Fairfax Radio Syndication suggests the following checks be made on the satellite equipment installation.
  - 1 Check there are no spider webs around the feed horn of the LNB. Because the LNB has constant power applied, spiders tend to live there during colder periods.
  - 2 Check for rust or loose fittings on the satellite antenna mount. Tighten any loose fittings being sure to check your alignment and performance afterwards.
  - 3 If you feel your dish alignment needs correction please contact your local satellite installer who has the proper equipment to fix the problem.